Abstract

Scheduling of jobs is a challenging problem in grid. Efficient job scheduling is essential for the effective utilization of the resources. We propose a grid model as a collection of clusters. In this paper, we apply Divisible Load Theory (DLT) and Least Cost Method (LCM) to model the grid scheduling problem involving multiple worker nodes in each cluster. We propose a hybrid job scheduling algorithm that minimizes the overall processing time of the job in a grid system that consists of heterogeneous hosts. The results show that the proposed algorithm is feasible and
improves the makespan considerably.

Reference


13. Amril Nazir, Hao Liu, Søren-Aksel Sørensen, "A Rental-Based Approach in a Cluster or


Index Terms

Computer Science  Algorithm

Key words

Grid

Job Scheduling

Cluster

Coordinator Node

Worker Node

Heterogeneous Hosts